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PTO/SB/81 (04-05) Approved for use through 11/30/2005 0MB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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	Application Number	10/741,829		
POWER OF ATTORNEY	Filing Date	December 19, 2003		
AND	First Named Inventor	Dennis Duprey, et al		
CORRESPONDENCE ADDRESS	Title	System and Method For		
***************************************		Performing		
/ %	Art Unit	2187		
JAN 2 7 2006 ³⁰	Examiner Name	Farrokh, Hashem		
\	Attorney Docket Number	EMC-03-098CIP1		
		 :		

I here	by revoke all previo	us powers of attorney given in the	above-ide	ntified applica	tion.	-
	by appoint:					
\boxtimes	Practitioners associ		242	27		
	OR		L			
	Practitioner(s) name	ed below:				
		Name		Registr	ration Number	
	our attorney(s) or agent(s nark Office connected the	 to prosecute the application identified a erewith. 	bove, and to	transact all busine	ess in the United States Patent a	nd
Please	e recognize or chang	e the correspondence address for	the above-i	dentified appli	ication to:	
\boxtimes	The address associa	ated with the above-mentioned Cu	stomer Nu	mber:		
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Ш	The address associa	ated with Customer Number:				
	OR					
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	City		State	e	Zip	
	Country					
¥ 4	Telephone Email					
I am t	ne: Applicant/Inventor.					·
	Assigned of record of the entire interest. See 27 CER 2.71					
	Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)					
SIGNATURE of Applicant or Assignee of Record						
Signa	ture	who the Kunthy		Date	1-23-01	
Name	Tame John M. Gunther Telephone 508-293-7255					
Title a	Title and Company Vice President and Assistant General Counsel, EMC Corporation					
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.						
\Box	*Total of fo	orms are submitted.				

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. STATEMENT UNDER 37 CFR 3.73(b)

		Trans-					
Applicant/Patent Owner: EMC Corporation							
Applie	Application No./Patent No. 10/741,829 Filed/Issue Date: December 19, 2003.						
Entitle	ed:	SYSTEM AND METHOD FOR ENVIRONMENT HAVING A C					
		EMC Corporation	a	Corporation		nership, university, government agency. etc.)	
(Name	of As	signee)	(Тур	e of Assignee, e.g., corporation	n, parti	nership, university, government agency. etc.)	
states 1.	that	it is: the assignee of the entire right,	title, and	d interest; or			
2. [an assignee of less than the enti- (The extent (by percentage) of its of	_				
in the	pate	nt application/patent identified abo	ve by virt	tue of either:			
Α. [An Assignment from the inventor(recorded in the United States Pater thereof is attached.				ified above. The assignment was 6, Frame 0514, or for which a copy	
OR B. [), of the	patent application/paten	t ident	tified above, to the current assignee	
	1.	From: The document was recorded in Reel, Frame,					
	2.	From: The document was recorded i Reel, Frame,	n the Uni	To: ited States Patent and Tr	adema	ark Office at	
	3. From: To: The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.						
[Additional documents in the chain of title are listed on a supplemental sheet.						
As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11. [NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to be recorded in the records of the USPTO. See MPEP 302.08]							
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.							
Signature Date							
_		John M. Gunth				508-293-7255 Telephone Number	
	•						
-	Vice President and Assistant General Counsel Title						

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.





UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

NOVEMBER 06, 2004

PTAS



102749398A

EMC CORPORATION
OFFICE OF THE GENERAL COUNSEL
176 SOUTH STREET
HOPKINTON, MA 01748

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/17/2004

REEL/FRAME: 015336/0514

NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

DUPREY, DENNIS

DOC DATE: 04/21/2004

ASSIGNOR:

O'BRIEN, WALTER A.

DOC DATE: 05/10/2004

ASSIGNOR:

MCGRATH, PAUL T.

DOC DATE: 04/21/2004

ASSIGNOR:

HAASE, DAVID

DOC DATE: 04/21/2004

ASSIGNEE:

EMC CORPORATION

176 SOUTH STREET

HODVINTON MASSACHUSETTE

HOPKINTON, MASSACHUSETTS 01748

015336/0514 PAGE 2

SERIAL NUMBER: 10741829 FILING DATE: 12/19/2003

PATENT NUMBER: ISSUE DATE:

TITLE: SYSTEM AND METHOD FOR PERFORMING A FULL COPY IN A DATA STORAGE

ENVIRONMENT HAVING A CAPABILITY FOR PERFORMING AN INCREMENTAL COPY

VIOLET MCCOY, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS JAN 2 7 2006

EMC-03-098CIP1

HEET ****7

CMULTUE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.				
1. Name of conveying party(ies): Dennis Duprey, Walter A. O'Brien, III, Paul T. McGrath and David Haase	Name and address of receiving party(ies): Name: EMC Corporation			
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	Internal Address:			
Nature of Conveyance: [X] Assignment [] Merger	Street Address: 176 South Street			
[] Security Agreement [] Change of Name [] Other	City: Hopkinton State: MA Zip: 01748			
Execution Date: April 21, 2004 and May 10, 2004	Additional name(s) and address(es) attached? [] Yes [X] No			
4. Application number(s) or patent number(s): If this document is being filed together with a new applic	ation, the execution date of the application is: 12-19-2003			
A. Patent Application No.(s) 10/741,829 B. Patent No.(s) Additional numbers attached? [] Yes [X] No				
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: [X]			
Name:	7. Total fee (37 CFR 3.41): \$40.00			
Internal Address: EMC Corporation	[] Enclosed			
Office of the General Counsel	[X] Authorized to be charged to deposit account			
Street Address: 176 South Street	8. Deposit account number: 05-0889			
City: Hopkinton State: MA Zip: 01748	(Attach duplicate of this page if paying by deposit account)			
DO NOT USE THIS SPACE				
9. Signature.	_			
Robert Kevin Perkins, Reg. No. 36,364 Name of Person Signing Signature Total number of pages comprising cover sheet: []				

ASSIGNMENT

WHEREAS, we, DENNIS DUPREY of Raleigh, North Carolina, WALTER A. O'BRIEN, III of Westborough, Massachusetts, PAUL T. MCGRATH of Raleigh, North Carolina, and DAVID HAASE of Fuquay Varina, North Carolina, have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled SYSTEM AND METHOD FOR PERFORMING A FULL COPY IN A DATA STORAGE ENVIRONMENT HAVING A CAPABILITY FOR PERFORMING AN INCREMENTAL COPY, the specification of which:

[]	is being executed on even date herewith and is about to be filed in the United States Patent Office;	1
[X]	was filed on December 19, 2003 as U.S. Application No. 10/741,829;	
[]	was patented under U.S. Patent Noon	

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein:

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its

successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Date:	4	2i	OA
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Inventor's Signature

Print full name of first inventor:

Dennis Duprey

Residence:

100 Tidbury Court, Raleigh, NC 27615

Citizenship:

USA

Mailing Address:

Same

STATE/COMMONWEALTH OF NORTH CAROLINA

COUNTY OF *JUK

Then personally appeared before me the above-named <u>Dennis Duprey</u> and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this <u>A/S7</u> day of <u>APR/L</u>, 2004.

Notary Public

Print Name: JULIE L. USTERMEYER

My Commission expires <u>D2/D9</u> / <u>2008</u>

PATENT/Joint Assignment EMC Docket No.: EMC-03-098CIP1

Date: 5/10/04	Walles a Brien III
Print full name of second inventor:	Walter A. O'Brien, III
Residence:	18 Brewer Drive, Westborough, MA 01581
Citizenship:	USA
Mailing Address:	Same
O'Brien, III known to me through satisfactory evidence	personally appeared before me the above-named Walter A.
[] driver's license; [X] (other) <u>PERSONALLY</u> to the foregoing Assignment and acknowledged that her	(NOUN TO ME to be the person whose name is subscribed she executed the same as his/her free act and deed for the
purposes therein contained.	Sandra O. Kulaga
	Notary Public Sandra A. Kulaga Print Name: NOTARY PUBLIC My Commission Expires March 27, 2009 My Commission expires March 27, 2009

PATENT/Joint Assignment LivIC Docket No.: EMC-03-098CIP1

Date: 4-21-04

Inventor's Signature

Print full name of third inventor:

Paul T. McGrath

Residence:

8608 Brookdale Drive, Raleigh, NC 27613

Citizenship:

USA

Mailing Address:

Same

STATE/COMMONWEALTH OF NORTH CAROLINA

COUNTY OF DURHAN

PAUL T.

Then personally appeared before me the above-named $\frac{McGRATH}{257}$ and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this $\frac{257}{257}$ day of $\frac{APRIL}{2}$, 2004.

Notary Public

Print Name: JULIE L. USTERMEYER

My Commission expires <u>02</u>/<u>09</u>/ <u>2008</u>

PATENT/Joint Assignment EMC Docket No.: EMC-03-098CIP1

Date: 4/21/04

Inventor's Signature

Print full name of fourth inventor:

David Haase

Residence:

904 Cedar Point Ct., Fuquay Varina, NC 27526

Citizenship:

USA

Mailing Address:

Same

STATE/COMMONWEALTH OF NORTH CAROLINA
COUNTY OF DURHAM

Then personally appeared before me the above-named ANID HOUSE and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this ANIO HOUSE and acknowledged that he/she executed the

Notary Public

Print Name: JULIE L. USTERMEYER

My Commission expires <u>02/09/2008</u>

			Application No.:	10/74	11,829	
TRANSMITTAL		Filing Date:	Dece	mber 19, 2003		
FORM JAN 2 7 2000		First Named Inventor:	Denn	is Duprey, et al		
(JAN 9.7.200.		Confirmation No.	6176			
围	JAN 2 7 2006 (2)		Group Art Unit	2187		
1/3	7		Examiner:	Farrokh, Hashem		
	THE MANAGEMENT OF THE PARTY OF		Customer No.	2422	27	
Tota	Number of Pages in this Submission:		Docket No.	EMC-03-098CIP1		
	E	CNCLOSU	JRES (check all that apply	<i>י</i>)		
	Authorization for the Commissioner to charge Deposit Account No. 05-0889 for fees associated with this transaction (in duplicate)		Assignment Recordation Cover Sheet Declaration/Power of Attorney		Petition for Revival of an Unintentionally Abandoned Application [37 CRF 1.137(b)] (in duplicate)	
	Amendment/Response After Final Affidavits/Decl.	Co	Correspondence Address		Status Inquiry Form PTOL-85B, Part B -Issue Fee Payment Transmittal," (in duplicate)	
	Extension of Time Request for Months	⊠ Sta	Indication Form ☑ Statement Under 37 CFR 3.73(b)		Express Abandonment Request	
	Information Disclosure Statement Request for Continued Examination Transmittal	Formal Drawings Letter to Official Draftsperson with () sheets of redlined changes to drawings Copy of PTO 948, "Notice of Draftsperson's Patent Review"			Terminal Disclaimer Customer Number Association	
	Response to Missing Parts/Incomplete Application			\boxtimes	Certificate of First Class Mailing	
	Certified Copy of Priority Document(s)	Preliminary Amendment			Certificate of Express Mail Mailing	
			ditional Enclosures:		Postcard	
<u> </u>	SIGNATUI	RE OF AP	PLICANT, ATTORNEY O	R AGI	ENT	
Tel:	Date Robert Kevin Perkins Esq. (Reg. No. 36,634) EMC Corporation Office of the General Counsel Tel: (508) 293-6985 Fax: (508) 293-7189 Hopkinton, MA 01748					
CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8]						
I hereby certify that this correspondence and the above-referenced enclosures are being:						
Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Transmitted by facsimile on the date shown below to the Patent and Trademark Office at (703) Date Signature Sandra A. Kulaga						
		Typeo	d or printed name of person s	igning	certificate	